

THE DRAGONFLY *EPICORDULIA REGINA*.

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On April 30, 1912, while at South Bay, Lake Okeechobee, Florida, the writer collected a fine male *Epicordulia regina* Selys, generally considered by authors to be the same as *Epicordulia princeps* Hagen. The specimen has been submitted to Mr. E. B. Williamson, who thinks that some record should be made of it, and accordingly it is figured on the accompanying plate. It expands 99 millimeters.

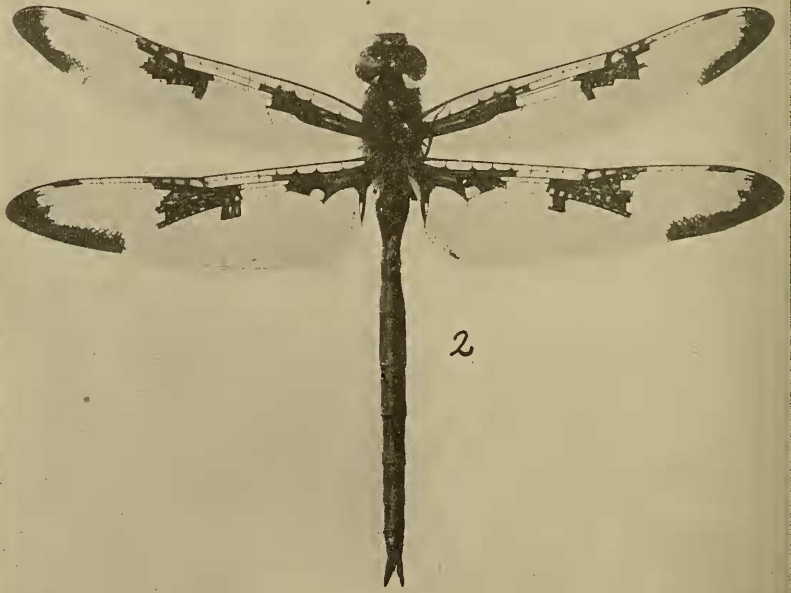
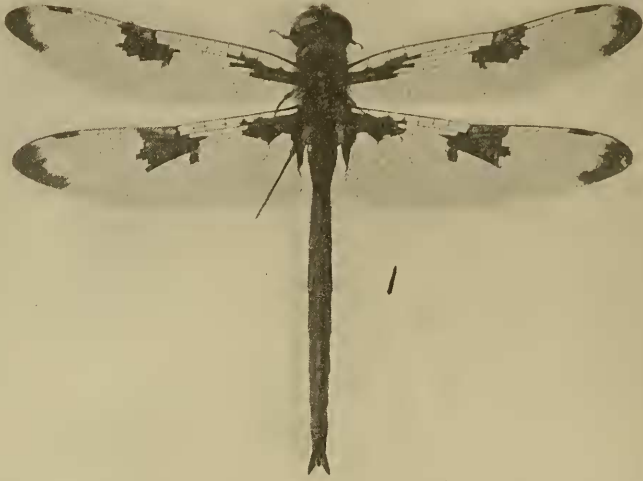
Dr. Philip P. Calvert has kindly shown me two male examples of *regina* in his collection. One came from Levy Co., Fla., April 24 (P. Laurent), and expands 104 millimeters, while the other was taken at Enterprise, Fla., April 15, 1896, by Dr. Castle and expands 109 millimeters. In the collection of the Museum of Comparative Zoölogy, Cambridge, Mass., there is a male *regina* from Lake Harney, Fla., May 4.

These four specimens are all larger than any of the fourteen examples of *princeps* in the writer's collection from New York, New Jersey, Virginia, and Iowa; also larger than the seven specimens shown me by Dr. Calvert from Maine, Massachusetts, Pennsylvania, and Texas.

In the examples of *regina* examined the spots on the wings are more drawn out than in *princeps*; especially is this true of the nodal spot, which is deeper in proportion to its length in *princeps* than the same spot in any of the specimens of *regina* so far seen. Also the terminal spot is more extended toward the base of the wing on the hind margin in *regina* than in *princeps*. On the same plate with the male *regina* is shown a male *princeps* taken at Singac, N. J., June 15, which was chosen because it is marked more nearly like *regina* than any other specimen in the writer's collection, but the differences already mentioned will be noted.

In his *Synopsis of the Neuroptera of North America* (1861), Dr. Hagen states at the end of his description of *Epitheca princeps*:

"A large specimen (♂) from Georgia, has 72 millims. length; alar expanse 102 millim., the fuscous spots of the wings are broader but it is hardly distinct."



This no doubt referred to what was ten years later named *regina* by Selys. His description was published in the Bulletin of the Royal Academy of Sciences, Letters and Fine Arts of Belgium (2) 31, p. 277, 1871. The measurements given of a male are: length of abdomen 54, inferior wing 47 millimeters, almost exactly those of the Florida example in the writer's collection. The type apparently was from Georgia, but other specimens are mentioned as having been examined by the author and Dr. Hagen. Particular attention is called to the greater size of *regina*, also to the fact that the brown spots on the wings are more extended:

"The basal passes a little beyond the level of the triangle on the superior (without occupying it), the nodal equally enlarged and prolonged arcuately on the inferior wings along the short sector, so as to approach the hind margin, and the apical, in running along the hind margin almost touches the prolongation of the nodal."

"Race ? *Cordulia regina* Hagen" is the caption under which Selys recorded these specimens, and then surmises that when more is known they may be considered distinct from *princeps*. The present writer thinks that *regina* should not be placed as a synonym of *princeps*, as is generally done, but should be given at least the rank of a race, and perhaps that of a species. This seems to be justified from an examination of the specimens and the fact that no intermediate examples have been found.

EXPLANATION OF PLATE.

FIG. 1. *Epicordulia princeps* Hagen. New Jersey.

FIG. 2. *Epicordulia regina* Selys. Lake Okeechobee, Fla.

Dr. Charles P. Alexander announces that his address is now Fernald Hall, Mass. Agr. College, Amherst, Mass., where all communications to him should be directed.